

**BILLING CODE 3510-22-P** 

#### DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XA595

Marine Mammal Stock Assessment Reports

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and

Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of availability; response to comments.

SUMMARY: As required by the Marine Mammal Protection Act (MMPA), NMFS has incorporated public comments into revisions of marine mammal stock assessment reports (SARs). The 2011 reports are final and available to the public.

ADDRESSES: Electronic copies of SARs are available on the Internet as regional compilations and individual reports at the following address:

<a href="http://www.nmfs.noaa.gov/pr/sars/">http://www.nmfs.noaa.gov/pr/sars/</a>. You also may send requests for copies of reports to:
Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected
Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring,
MD 20910-3226, Attn: Stock Assessments.

Copies of the Alaska Regional SARs may be requested from Robyn Angliss,

Alaska Fisheries Science Center, 7600 Sand Point Way, BIN 15700, Seattle, WA 98115.

Copies of the Atlantic Regional SARs may be requested from Gordon Waring, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543. Copies of the Pacific Regional SARs may be requested from Jim Carretta,
Southwest Fisheries Science Center, NMFS, 8604 La Jolla Shores Drive, La Jolla, CA
92037-1508.

FOR FURTHER INFORMATION CONTACT: Shannon Bettridge, Office of Protected Resources, 301-427-8402, Shannon.Bettridge@noaa.gov; Robyn Angliss, Alaska Fisheries Science Center, 206-526-4032, Robyn.Angliss@noaa.gov; Gordon Waring, Northeast Fisheries Science Center, 508-495-2311, Gordon.Waring@noaa.gov; or Jim Carretta, Southwest Fisheries Science Center, 858-546-7171, Jim.Carretta@noaa.gov. SUPPLEMENTARY INFORMATION:

# Background

Section 117 of the MMPA (16 U.S.C. 1361 et seq.) requires NMFS and the U.S. Fish and Wildlife Service (FWS) to prepare SARs for each stock of marine mammals occurring in waters under the jurisdiction of the United States. These reports contain information regarding the distribution and abundance of the stock, population growth rates and trends, the stock's Potential Biological Removal (PBR) level, estimates of annual human-caused mortality and serious injury from all sources, descriptions of the fisheries with which the stock interacts, and the status of the stock. Initial reports were completed in 1995.

The MMPA requires NMFS and FWS to review the SARs at least annually for strategic stocks and stocks for which significant new information is available, and at least once every 3 years for non-strategic stocks. NMFS and FWS are required to revise a SAR if the status of the stock has changed or can be more accurately determined. NMFS, in conjunction with the Alaska, Atlantic, and Pacific Scientific Review Groups (SRGs),

reviewed the status of marine mammal stocks as required and revised reports in each of the three regions.

As required by the MMPA, NMFS updated SARs for 2011, and the revised reports were made available for public review and comment for 90 days (76 FR 52940, August 24, 2011). NMFS received comments on the draft SARs and has revised the reports as necessary. The final reports for 2011 are available on NMFS' website (see ADDRESSES).

#### Comments and Responses

NMFS received letters containing comments on the draft 2011 SARs from the Marine Mammal Commission (Commission), six non-governmental organizations (Humane Society of the United States, Cascadia Research Collective, Center for Biological Diversity, Center for Coastal Studies, Garden State Seafood Association, and Hawaii Longline Association), the Western Pacific Regional Fisheries Management Council, and one individual.

Many comments recommended initiation or repetition of large data collection efforts, such as abundance surveys, observer programs, or other efforts to estimate mortality. Many comments, including those from the Commission, recommending additional data collection (e.g., additional abundance surveys or observer programs) have been addressed in previous years. Although NMFS agrees that additional information would improve the SARs and inform conservation decisions, resources for surveys and observer programs are fully utilized and no new large surveys or other programs may be initiated until additional resources are available. Such comments on the 2011 SARs, and responses to them, may not be included in the summary below because the responses

have not changed. Comments on actions not related to the SARs (e.g., convening a Take Reduction Team or listing a marine mammal species under the Endangered Species Act (ESA)) are not included below. Comments suggesting editorial or minor clarifying changes were incorporated in the reports but are not included in the summary of comments and responses below.

In some cases, NMFS' responses state that comments would be considered or incorporated in future revisions of the SAR rather than being incorporated into the final 2011 SARs. These delays are due to the schedule of the review of the reports by the regional SRGs. NMFS provides preliminary copies of updated SARs to SRGs prior to release for public review and comment. If a comment on the draft SAR suggests a substantive change to the SAR, NMFS may discuss the comment and prospective change with the SRG at its next meeting.

### Comments on National Issues

<u>Comment 1</u>: The Commission recommends that NMFS develop a nationwide, 5-year schedule for carrying out stock assessments that reflects projections and priorities for available ship and aircraft time, and identifies the funding necessary to complete marine mammal population surveys.

Response: NMFS agrees that such a schedule would be useful, and is currently in the process of developing a strategic plan to focus on resource acquisition and a prioritization scheme to meet stock assessment goals. The plan is expected to address the economic value of conducting regular stock assessments, identifying data needs, and revising performance measures to track stock progress. In addition, such a plan would potentially account for depleting budgets and resource constraints by recommending

more efficient use of ship time through multi-species ecosystem studies, better survey designs and sampling technologies, and leveraging inter- and intra-agency resources. A 2012 fall workshop is being planned to address some of these objectives.

Comment 2: The Commission repeats its 2010 recommendation that NMFS review its observer programs nationwide, set standards for observer coverage, identify gaps in existing coverage, and determine the resources needed to (1) observe all fisheries that directly interact or may directly interact with marine mammals, especially strategic stocks and (2) provide reasonably accurate and precise estimates of serious injury and mortality levels.

Response: NMFS has conducted multiple comprehensive nationwide reviews of its observer programs. In 2011, NMFS published the first edition of the National Bycatch Report, which provided a nation-wide compilation of bycatch estimates in U.S. commercial fisheries. The Report included information on bycatch sampling and estimation methods, a framework for evaluating the quality of bycatch estimates, and performance measures for monitoring improvements to bycatch data quality and estimates over time. The report identifies gaps in existing observer coverage with specific recommendations for additional resources required to improve bycatch data collection and estimation methods, which will form the basis of a funding strategy to support adequate observer programs for all living marine resources. The report is the first in a planned series of national bycatch reports designed to track and report on efforts to monitor bycatch.

NMFS has taken several steps in recent years to address shortcomings in protected species observer coverage, including increased observer coverage in the Gulf of

Mexico reef fish fishery, the North Carolina inshore gillnet fishery, the American Samoa longline fishery, and the Gulf of Mexico menhaden purse seine fishery. NMFS is preparing to observe the Southeast Alaska drift gillnet fishery, beginning in 2012.

Comment 3: The Commission recommends that NMFS partner in 2012 with state fishery management agencies, the fishing industry, and other stakeholders to develop a funding strategy that will substantially improve the extent and level of observer coverage and data collection concerning incidental serious injury and mortality of marine mammals within five years.

Response: NMFS is seeking to improve its capacity to address marine mammal interactions through the Marine Mammal Take Reduction Program, enhanced observer coverage and gear marking, and further characterizations of fishing gear and the nature of interactions. Observer coverage is not particularly helpful or practical in certain fisheries, such as those using trap/pot gear. For those trap/pot fisheries, NMFS is working to develop or increase requirements for gear marking to help identify gear that may be recovered from an entangled animal.

Comment 4: The Commission recommends that NMFS develop alternative strategies for collecting information on mortality and serious injury levels in fisheries for which entanglements are difficult to detect or quantify using traditional observer programs. Alternatives include more comprehensive gear-marking or gear-tracking requirements. At a minimum, gear markings should enable NMFS to identify the fishery, region, and gear part of any gear removed from whales, and ideally markings should be "readable" at a distance.

Response: See response to Comment 3.

Comment 5: To best manage transboundary stocks, the Commission recommends that NMFS collaborate with other nations and international fishery management organizations to develop and implement cooperative or complementary strategies for assessing stock status and the rate of serious injury and mortality in fisheries. Priority should be given to those stocks that are known to interact significantly with fisheries. The goal should be to manage transboundary stocks using a PBR level calculated for the entire stock considering all bycatch, something that has been suggested in the proposed revisions to the stock assessment guidelines.

Response: NMFS has previously responded to this comment (see 76 FR 34054, June 10, 2011, comment 2) as follows: "NMFS, through the Office of International Affairs, is preparing a comprehensive international action plan for marine mammal conservation. As this plan is being developed, NMFS is also evaluating strategies to obtain information on the marine mammal conservation programs in other nations pursuant to MMPA section 101(a)(2)." This action plan will likely be released in mid-2012. In addition, NMFS collaborates closely with Canada on research, monitoring, and management for species in the NMFS Northwest and Northeast regions and with Regional Fisheries Management Organizations where appropriate. NMFS is also working within Regional Fisheries Management Organizations to identify fisheries with bycatch and to adopt conservation and management measures to reduce that bycatch.

Comment 6: The Commission recommends that NMFS consider the various approaches that are available for integrating all human-related risk factors into stock assessments and adopt an integration method that will produce, at a minimum, reasonable

estimates of the lower and upper bounds of serious injury and mortality rates for every stock.

Response: NMFS has previously responded to this comment (see 76 FR 34054, June 10, 2011, comment 3). as follows: "MMPA section 117(3) contains directions for including risk factors in SARs. The MMPA states that SARs should estimate annual human-caused mortality of each stock, by source, and, for strategic stocks, other factors that may be causing a decline or impeding recovery of the stock, including effects on marine mammal habitat and prey."

Comment 7: All stock assessments should be updated to include habitat issues. Habitat loss and degradation rank among the primary threats to most marine mammals. In light of changing ocean conditions in response to global warming and ocean acidification, these habitat threats should also be discussed in the habitat section.

Response: NMFS has previously responded to this and similar comments (see 76 FR 34054, June 10, 2011, comment 22; 75 FR 12498, March 16, 2010, comments 1 and 6). Where appropriate, NMFS strives to include this information and will provide updates when new data become available.

Comment 8: NMFS must update abundance estimates for many stocks with only old population data. Given the precautionary principles incorporated into the MMPA, any such stock should be declared "strategic," because the lack of a PBR makes it impossible for NMFS to conclude that the stock does not meet the definition of strategic.

Response: According to the NMFS 2005 Guidelines for Assessing Marine

Mammal Stocks, if abundance or human-related mortality levels are truly unknown, some judgment will be required to make this determination about stock status. If there is

known or suspected human-caused mortality of a stock, decisions about whether such stocks should be declared strategic or not should be made on a case-by-case basis. Stocks for which the minimum population estimate (Nmin) becomes unknown should not move from "strategic" to "not-strategic", or vice versa, solely because of an inability to estimate Nmin (or PBR).

<u>Comment 9</u>: The threat of sonar and other military training exercises should be discussed for all stocks that may be exposed to such activities in the Atlantic and Pacific.

Response: MMPA section 117(3) contains directions for including risk factors, stating that SARs should contain estimates of annual human-caused mortality of each stock, by source, and, for strategic stocks, other factors that may be causing a decline or impeding recovery of the stock, including effects on marine mammal habitat and prey. As very few serious injuries and mortalities can be directly attributable to military training exercises, the impacts of this potential threat can be difficult to assess. Where appropriate, NMFS strives to include this information and will provide updates when new data become available.

## Comments on Atlantic Regional Reports

<u>Technical changes:</u> First, since publication of the draft 2011 SAR for North Atlantic right whales, three technical changes have been made to the report. In its February 2012 meeting, the Atlantic SRG recommended that for the North Atlantic right whale SAR, the default Rmax for cetaceans (0.04) be used rather than the observed net growth rate (0.024). This results in an increase in PBR from 0.5 to 0.8.

Second, subsequent to publication of the draft 2011 North Atlantic right whale SAR, NMFS noticed a mistake in reporting the U.S. and Canadian serious injuries and

mortalities. In the draft SAR, all the reported fishery-caused serious injuries and mortalities were attributed to U.S. fisheries (i.e., all injured or dead animals were seen in U.S. waters and no information was available to indicate that the serious injuries or mortalities were caused by a Canadian fishery). The report writers mistakenly recorded the ratio of seriously injured animals to mortalities (0.4 to 0.6) as the ratio of U.S. to Canadian serious injuries and mortalities. In the final 2011 SAR, the ratio of U.S. to Canadian serious injuries and mortalities is corrected, and all fishery serious injury and mortality is correctly assigned to U.S. fisheries (0.8).

Third, adult (North Atlantic right whale) male #1980, which was observed on 2/3/2008 with an apparent constricting wrap of line and in declining condition, was initially determined to be a serious injury. That animal was observed gear free in 2011, and has been removed from the serious injury list. This resulted in a decrease in the reported fishery serious injuries and mortalities from 1.0 to 0.8 in the final 2011 SAR.

<u>Comment 10</u>: The Commission recommends that NMFS conduct the required surveys of North Atlantic pinniped stocks, incorporate the results into SARs, and use that information to manage those stocks and the risk factors affecting them.

Response: In spring 2011, the Northeast Fisheries Science Center (NEFSC) conducted live capture/tagging of harbor seals to obtain a survey correction factor for the scheduled late May/early June abundance survey along the coast of Maine. The aerial survey was not completed due to fog during the entire survey window. The NEFSC is scheduled to repeat this project in spring 2012. Further, the NEFSC has begun counting archived images collected during the 2005-2011 seasonal monitoring surveys in southeastern Massachusetts coastal waters. These areas contain the largest number of

gray seals in U.S. waters. The goal is to obtain a minimum raw count of non-pup gray seals. In addition, images from monitoring surveys of gray seal pupping colonies in Maine and Massachusetts are also scheduled to be counted.

Comment 11: The Commission recommends that NMFS improve stock assessments for bottlenose dolphins in both the Atlantic and the Gulf of Mexico by conducting the research needed to resolve questions concerning stock structure, provide more accurate and precise estimates of the abundance and trends of the various stocks, and provide more accurate and precise estimates of the level of serious injury and mortality in fisheries and from other human activities.

Response: NMFS has taken a number of actions that will improve stock assessments of bottlenose dolphins in the Gulf of Mexico and Atlantic Ocean. In 2010, NMFS collected biopsy samples of bottlenose dolphins in Pamlico Sound, NC. These samples and those collected in adjacent areas will be used to further refine the genetic stock structure of bottlenose dolphins in the North Carolina region and aid in the ongoing Bottlenose Dolphin Take Reduction Plan. As part of the Deep Water Horizon oil spill Natural Resource Damage Assessment (NRDA), NMFS and the National Ocean Service have been conducting seasonal stock structure and abundance research in oiled areas of Louisiana and Mississippi (Barataria Bay, Mississippi Sound, and Chandeleur Sound). These studies began in May 2010 and will continue through at least spring 2012. NMFS and the Department of the Interior's Bureau of Ocean Energy Management, working under an Interagency Agreement, will conduct bottlenose dolphin stock structure research in the northern Gulf of Mexico in 2012 and 2013. This work will be conducted in bay, sound or estuary areas that have not been previously sampled. NMFS conducted a

Commission-supported workshop in 2011 to refine best practices for conducting mark-recapture studies to estimate the abundance of bay, sound and estuary populations of bottlenose dolphins. The report of the workshop proceedings was prepared and is available for the public.

Comment 12: The Commission recommends that NMFS develop a stock assessment plan for the Gulf of Mexico that describes (1) a feasible strategy for assessing the Gulf's marine mammal stocks and (2) the infrastructure, expertise, and funding needed to implement it.

Response: NMFS has produced two documents that describe a feasible strategy for assessing the Gulf's marine mammal stocks and the required infrastructure, expertise, and funding to implement the strategy: (1) the Southeast Fisheries Science Center Marine Mammal Program Strategic Plan (2008) and (2) the North-Central Gulf of Mexico Bottlenose Dolphin Research Plan (2007). Both plans need to be updated to reflect changes in staffing, resources, and research conducted since 2008. NMFS also worked closely with the Commission to develop a strategic marine mammal research plan in response to the Deep Water Horizon oil spill.

Comment 13: While we understand that these SARs provide mortality information only through 2009, the fact that NMFS is aware of the Deepwater Horizon disaster of 2010 warrants a mention in SARs for the Gulf of Mexico. The only discussion of habitat impacts relates to disturbance from construction or removal operations.

Response: As the Natural Resource Damage Assessment process continues and is not complete, NMFS cannot report on unconfirmed mortalities or speculate on habitat

impacts. The potential impacts of the Deep Water Horizon oil spill on Gulf of Mexico cetacean stocks and habitat are expected to be included in the 2012 SARs.

Comment 14: Bottlenose dolphin stocks in the Gulf of Mexico should be designated strategic. NMFS should convene a bottlenose dolphin take reduction team for the Gulf. Between February 2010 and October 30, 2011, NMFS has documented 586 cetacean "strandings" in the Northern Gulf of Mexico, of which 95% stranded dead. Most of these were bottlenose dolphins. A common bacterium known to cause abortions in marine mammals killed some of the hundreds of dolphins - more than 100 of them calves and fetuses.

Response: The status of stocks in the 2011 SARs is based on mortality and serious injury data through 2009. All of the 32 Gulf of Mexico bay, sound and estuary, and the western coastal bottlenose dolphin stocks are designated as strategic in the 2011 SAR. We will continue evaluating the status of these stocks as well as the eastern and northern coastal, continental shelf and oceanic bottlenose dolphin stocks for the 2012 SARs.

NMFS does not have enough information to convene a take reduction team for the Gulf of Mexico, which would be based only on fisheries-related mortality. While an unprecedented number of bottlenose dolphins continue stranding in the northern Gulf, data have not yet been analyzed to determine which stocks are affected by the ongoing Unusual Mortality Event (UME). NMFS will continue evaluating the impact of these mortalities as part of the UME investigation and the need for a take reduction team.

<u>Comment 15</u>: Long-finned and short-finned pilot whales should both be considered strategic. In the Atlantic, two short-finned pilot whales died stranded on

Massachusetts beaches in 2011. These pilot whales typically are not found this far north and range in the warmer waters such as the Gulf of Mexico and the ocean off Florida.

Additionally, a pod of more than 20 pilot whales stranded in multiple areas in shallow Gulf of Mexico waters and mangroves. A majority of the pilot whales died.

Response: Strandings are not part of the status of stocks determination unless the cause of the stranding is attributed to human activity. Human factors were not identified in these two stranding events. In the cases where strandings are caused by human activities, any human-caused mortality and serious injury data would be compiled and evaluated with respect to the PBR for the stock.

Comment 16: All SARs for marine mammals that range in the Gulf of Mexico should be updated to include threats from oil spills and associated oil and gas drilling activities, including seismic exploration activities. Specifically, NMFS must consider the Deepwater Horizon oil spill in 2010 as well as any new information concerning its impacts on marine mammals.

Response: NOAA is estimating the impacts of the Deep Water Horizon oil spill, including mortality, as part of the ongoing Natural Resource Damage Assessment process. When that process is complete, the SARs will be updated to reflect any potential impacts to marine mammals. NMFS agrees that a summary of the potential impacts of oil and gas-related activities on marine mammals is appropriate for the Gulf of Mexico SARs. For each SAR, NMFS is developing a habitat section that will be included in future SARs. This section will attempt to address the potential impacts of human activities on a marine mammal stock including, if appropriate, oil and gas-related activities.

Comment 17: We ask that the SAR for right whales include mortalities and serious injuries more recent than 2 years old (in this case from 2009, so the data will be 3 years behind by the time the SAR is finalized). NMFS provides more timely summaries to the Atlantic Large Whale Take Reduction Team on an annual or shorter basis, and the annual meeting of the right whale Consortium has a presentation of mortalities and serious injuries since the prior meeting 12 month earlier. NMFS has this information and should use it in the SAR for this species where no extrapolation for fishing effort is required that would slow the process. Delaying this information hampers efforts to the magnitude of (or trend in) anthropogenic impacts to the species. This comment is also germane to humpback and fin whales.

Response: NMFS strives to include the most recent data on serious injury and mortality in each SAR, but this information requires analysis and confirmation before being included and published. Draft SARs are reviewed by regional SRGs as early as the fall of the year prior to publication, and the information must be accurate at that time. Further lag time is necessitated by the 90-day public comment period and the agency clearance and publication processes.

<u>Comment 18</u>: It is not clear why the region proposes removing the last paragraph of the section on Human-Caused Mortality and Serious Injury in the humpback whale report that contains a discussion of the need to better understand the level of anthropogenic mortality by assuring recovery of carcasses and necropsy.

Response: NMFS acknowledges that the reference to observer coverage in the paragraph is misleading because those activities have almost no influence on the counts of takes. Because these counts are minimums, they most likely understate the level of

human interactions mentioned in paragraph 3 of the "annual human-caused serious injury and mortality" section. The paragraph is retained and the phrase "fishery observer data" is changed to "data assessed for serious injury and mortality."

Comment 19: There is an apparent omission in the detailing of mortalities of humpback whales. We note the following case from the NOAA's large whale stranding data base (NER020608Mn). The comment accompanying the documentation of this February 6, 2008 mortality was "Carcass reported by NOAA Fisheries observer Red nylon cord wrapped ~4-5 times around fluke, possibly identified as lobster gear."

Response: This event did not meet the criteria for inclusion because NMFS could not confirm from the available data that the wraps were constricting, and no necropsy was conducted to confirm the associated hemorrhaging.

Comment 20: The SAR for short-beaked common dolphin states that there were "annual research activity mortalities and serious injuries that were not included in the bycatch estimates." We believe that these fishery-related mortalities (albeit during research activities) must be included in the estimates. We assume that the 0.2 estimate for the 5 year average is the result of the single take in a monkfish research gillnet in 2009 as discussed in the text. We also remind the region that, to the best of our knowledge, it does not possess authorization for these sorts of mortalities and should seek formal incidental take authorization for its research.

Response: Wording in the SAR that says the common dolphin research take was not included in the bycatch estimates is not correct and has been removed. In fact, the 0.2 addition to the five-year average for this take was added twice, as it was already accounted for in the bycatch table. However, the Northeast Sink Gillnet fishery mean

annual mortality number has been revised to 27 to account for a rounding error. The NEFSC is in the process of obtaining authorization for fishery-related research takes (see response to comment 21).

Comment 21: It is evident that harbor porpoise mortality continues to exceed PBR. To add to the species' woe, the SAR details the mortality of 12 porpoises in a monkfish research fishery in 2009. If this level of mortality resulted from nets fished outside the harbor porpoise management areas, it may be an indication that these areas are not sufficiently protective of this stock. It is also important to note that, to the best of our knowledge, the region does not possess authorization for research-related mortalities and needs to seek formal incidental take authorization for its fishery research.

Response: The NEFSC is in the process of issuing letters of authorization under the MMPA for fishery-related research takes where needed to supplement existing MMPA and ESA scientific research permits.

Comment 22: Abundance estimates are outdated for harbor, harp, and gray seals. The sections on other mortality give short shrift to the discussion of illegal shooting that is an increasing problem. The region needs to devote at least a sentence or two in the SARs addressing the numbers of animals found illegally shot as it helps inform potential trends in and sources of anthropogenic mortality.

Response: Information has been added to the 2011 SARs indicating the estimated number of seals injured and killed by illegal shootings. From 2005-2009, there were 7 harbor seals, 3 harp seals, 1 gray seal, 1 hooded seal, and 2 unidentified seals reported as having been shot in the NOAA Northeast and Southeast marine mammal stranding databases.

Comment 23: The change in the abundance estimate for Atlantic white-sided dolphins and consequent reduction in the PBR results in fishery-related mortality once again exceeding PBR. NMFS has convened take reduction teams to address fishery-related bycatch of this and other species. It would seem particularly important to review the measures under the take reduction plan for the Northeast Bottom Trawl fishery.

Response: The NEFSC is currently investigating the past and present trends in abundance and bycatch estimates of Atlantic white-sided dolphins. This will determine the most appropriate current bycatch estimates and determine whether the abundance estimates are changing due to analytical reasons, changes in the dolphin's spatial-temporal use of U.S. waters, or fishery-related mortality. The results of these investigations will likely be available in early 2013, at which time NMFS will determine if the Atlantic Trawl Gear Take Reduction Team will meet to review and discuss possible measures to reduce bycatch to below PBR.

Comment 24: According to the draft SAR, the population estimate for white-sided dolphin is based upon "the sum of the 2006 and 2007 surveys," yet the 2006 and 2007 surveys covered an area where you would not expect to find components of the white-sided dolphin stock and was conducted during a time when you would expect low observations, resulting in low estimates. Why is there no "Current Population Trend Analysis" for this stock? What are the results of the 2008, 2009, 2010 surveys for the white-sided dolphins?

Response: See response to comment 23.

Comment 25: The estimate of Nmin for white-sided dolphin is the only case in the Atlantic Ocean in 2011 in which the population estimate fluctuated more than 1% in

either direction, in fact it was reduced by about 60%. This reduction has caused the stock to be considered strategic, a designation that usually triggers a take reduction team meeting and possibly the implementation of additional regulations with serious negative impacts on the fishing fleets. What additional analyses will be conducted to verify this estimate? Why would the Agency initiate a Take Reduction Team without the results of Spring/Fall Surveys conducted in 2011 and 2012?

Response: See response to comment 23.

Comment 26: The draft 2011 white-sided dolphin SAR contains the statement that "The total number of white-sided dolphins along the eastern U.S. and Canadian Atlantic coast is unknown." The Summary Table 1 for all "Atlantic Marine Mammal Stocks" shows that the Nmin and PBR estimates for 19 stocks are considered "unknown", and that 32 other separate stocks are considered "undetermined." Why is the Nmin & PBR for white-sided dolphin not "unknown" or "undetermined"? What is the justification for a "strategic" designation?

Response: To clarify this section, NMFS has reworded the text in the SAR to read "Abundance estimates of white-sided dolphins from various portions of their range are available....". The designation of a population estimate as "unknown" is used for stocks which are rarely seen in surveys and thus no estimates can be generated. The designation "undetermined" is used for the PBR of a stock with abundance estimates too old to be used in the PBR calculation. Atlantic white-sided dolphins became strategic because the best abundance estimate resulted in a PBR that was lower than the mortality estimate. It is recognized, however, that the inter-annual variability of recent white-sided

dolphin estimates has been high, and, as mentioned above, this is something NMFS is investigating.

Comment 27: The draft 2011 gray seal SAR states that "Present data are insufficient to calculate the minimum population estimate for U.S. waters." Identical statements have been made in every Marine Mammal Stock Assessment since 2005. Furthermore, the draft 2011 SAR states that "Current estimates of the total western Atlantic gray seal population are not available." We strongly recommend that resources be immediately devoted to delivering a valid determination.

Response: See response to comment 10.

Comment 28: The draft 2011 Gulf of Maine humpback whale SAR states that "Not all whales migrate to the West Indies every winter...." As a minor point of clarification, the only direct support for overwintering by this stock is in the Gulf of Maine, where a small number of individual juveniles have been re-sighted across a winter season (Clapham et al., 1993; Robbins, 2007). It has not yet been determined whether whales observed off the mid-Atlantic and southeast U.S. necessarily overwinter.

Response: NMFS agrees that more research is needed to determine whether these whales remain in the Gulf of Maine. NMFS maintains that the sentence is accurate as written, as it does not specify wintering grounds.

Comment 29: There is a long paragraph in the draft report that discusses changes in the spatial distribution of Gulf of Maine humpback whales in relation to prey abundance. I suggest that this paragraph be revised, as it is now quite dated and missing information from more recent years.

Response: The paragraph is still accurate and discusses an important aspect of humpback ecology.

Comment 30: Robbins (2009) calculated the minimum number of Gulf of Maine humpback whales alive in 2003 to be 783 individuals. This was based on the number photo-identified in 2003 plus the whales that were seen both before and after that year. This number was calculated based on intensive research effort as part of the MONAH project and is likely the best minimum estimate available for this population.

Response: The 2003 estimate to which the commenter refers has considerable unquantifiable uncertainty due to its age. As recommended in the Guidelines for Assessing Marine Mammal Stocks Workshop Report (Wade and Angliss 1997), abundance estimates older than eight years should not be used for calculationing PBR.

Comment 31: The draft 2011 Gulf of Maine humpback whale SAR states that 6.5% growth is close to the theoretical maximum for this population, while it appears to have been calculated using only the observed survival and reproduction values from the same time period. Seeing as none of the population growth rate estimates are current, I am uncertain of the value of comparing them to a theoretical maximum. Zerbini et al. (2010) is now the most recent reference for this work.

Response: NMFS has added references and raised Rmax in the SAR for this stock based on the literature referenced. Given regional variability across different ecosystems and MMPA's precautionary appraoch, NMFS will not apply the global theoretical value noted in Zerbini, et al. (2010).

<u>Comment 32</u>: Previous Gulf of Maine humpback whale SARs have considered unassigned human-caused serious injury and mortality cases to be all or none Gulf of

Maine whales. I suggest that takes instead be allocated probabilistically based on the proportion of Gulf of Maine whales identified in these areas.

Response: Unless proven to be from a different stock, NMFS assigns Gulf of Maine humpback whale human-caused mortality or serious injury cases first discovered in U.S. waters to the Gulf of Maine stock. This is the most risk-averse approach for the stock. Given the very small sample sizes of serious injuries and mortalities for this stock, it is not practicable to allocate takes probabilistically.

Comment 33: Minimum serious injury and mortality determinations may not be appropriate for comparison to PBR based on studies evaluating the effectiveness of PBR with underestimated mortality (Wade, 1998). I recommend that further work be done to assess the appropriateness of a minimum mortality metric for comparison to PBR or evaluate the possible effect on stocks using a plausible range of mortality estimates.

Response: NMFS is considering adopting this approach and, once the methods are vetted and approved, will include it in future stock assessments.

Comment 34: The information presented for scar-based studies of entanglement is outdated. Current results and inferences should be drawn from the most recent technical reports (Robbins, 2009, 2010, 2011). For example, data support that juveniles (not just yearlings) are more likely to be entangled, and that less than 10% of entanglements are reported annually, with approximately 3% of the population dying from entanglement each year. Benjamins et al. (2011) is now the most current publication on humpback whale entanglements off Newfoundland.

Response: The commenter listed two publications not available until after the draft 2011 SAR was made available to the public. This information will be incorporated into the 2012 SAR as appropriate.

#### Comments on Pacific Regional Reports

<u>Comment 35</u>: The Commission recommends that NMFS conduct the necessary surveys to update SARs for harbor seals along the Oregon and Washington coasts and in Washington inland waters.

<u>Response:</u> The Alaska Fisheries Science Center and the Northwest Regional Office requested funding for both harbor seal and harbor porpoise surveys in 2011; however, these surveys were not funded.

Comment 36: The Commission recommends that NMFS maintain and enhance existing collaborations to obtain the data necessary to generate stock assessments for all Pacific Island cetaceans within U.S. jurisdiction, and to seek new opportunities, such as collaborating with the Navy, to leverage resources for accomplishing this challenging task.

Response: NMFS agrees and is actively engaged in collaborative research within the Pacific Islands region to generate the data necessary for future stock assessments. In 2011 and in 2012, the U.S. Navy provided partial support to NMFS for surveys in the Marianas regions, a partnership NMFS hopes to maintain in to the future in order to satisfy NMFS and Navy mandates.

Comment 37: Though the region may have reviewed the stock assessments for the ESA-listed stocks (e.g., blue whales, humpback whales, etc.), there is no mention made of this. In fact, there is new information for a number of these stocks, and their SARs

should have been revised to provide it. As one example, the most recent mortality data in the Eastern North Pacific blue whale SAR is for 2008, but there is documentation of mortality to at least one blue whale in 2009. Importantly, this particular instance was in a NOAA-contracted research vessel, and the region lacks an Incidental Take Authorization for research-related mortality.

Response: The SARs for all strategic stocks (including stocks for which strategic status is due to listing under the ESA) are reviewed annually, as required. The inclusion of a relatively small change in estimated mortality or abundance would not change the status of these stocks nor provide for a more accurate assessment of their status. Although NMFS attempts to update SARs when information becomes available (whether the new information would change the status or not), some minor changes might not be incorporated into a SAR in any given year.

<u>Comment 38</u>: NMFS should update the false killer whale abundance estimate based on recent surveys as soon as possible.

Response: NMFS plans to update the false killer whale SAR to include a new abundance estimate from the 2011 survey as soon as the analyses are completed and have been peer-reviewed.

Comment 39: While the primary cause for the decline in Hawaiian monk seals is limited food availability, this assessment should include more information about the loss of pupping habitat due to sea level rise which will continue to threaten the monk seals. Additionally, Hawaiian monk seals on the Main Hawaiian Islands are increasingly injured by fishing hooks, and the use of barbless hooks could reduce serious injuries. There is newer information on the Main Hawaiian Islands population that should be

incorporated into the stock assessment. A series of articles on Hawaiian monk seals was published in a special issue of Aquatic Mammals 37:1 (2011).

Response: Regarding sea level rise, the SAR notes this as a potential threat and cites the single research paper that analyzes this. There is no additional information to characterize the threat at this time, though additional analysis of climate impacts on the Northwest Hawaiian Islands is currently underway. Regarding hooking incidents within the Main Hawaiian Islands, the SAR contains updated information through 2008, the most recent when the SAR was drafted in 2010. The Main Hawaiian Island monk seal population is estimated to be growing robustly despite the unknown fisheries interaction rate. Therefore, while the absolute number of hookings appears to be growing, it is not possible to determine whether the rates of hooking, injury or mortality is changing significantly.

The noted Aquatic Mammals special issue was published after the 2011 SAR was drafted in 2010. The SAR is not meant to review all aspects of research and management of the species, but instead focuses on stock assessment issues prescribed to be addressed in the current Guidelines for Assessing Marine Mammal Stocks. Critical habitat revisions for Hawaiian monk seals would be covered at such time that a new critical habitat designation occurs.

Comment 40: The stock assessment for long-beaked common dolphin should be updated due to new information. At least three dolphins died as a result of an underwater blast during Navy training exercises. Two additional dolphins were found dead later, which may have been related to the exercise off the San Diego coast.

Response: A draft 2012 SAR for long-beaked common dolphin is currently in revision and will be released for public review in mid-2012. This SAR will include information on the blast trauma incident.

Comment 41: A number of stocks have abundance estimates that were becoming outdated (i.e., 8 or more years old) and yet were provided with PBRs (e.g., Spinner dolphins—Hawaiian Islands, Short-finned pilot whales—Hawaii stock). We see that the final SARs for these stocks that were not reviewed this year still retain this information even though population abundance estimates were based on a now-outdated 2002 survey. This is also true for some stocks in the current SARs. Where surveys are from 2002 or prior years, SARs should be corrected such that PBRs based on outdated information default to "undetermined."

Response: Draft 2013 SARs for all Hawaiian stocks will include new abundance information based on the 2010 survey. Those reports were not revised in 2011 because the status of those stocks with outdated abundance estimates will not change, i.e. changing the PBRs to "undetermined" would not change the status of those stock from "not strategic" to "strategic."

Comment 42: It would seem important for the region to speculate on possible reasons for the decline in harbor seal California stock counts between 2005 and 2009 (as illustrated in Figure 2). It is striking and begs explanation.

Response: A similar decline in counts was observed in 1993 (shown in Fig. 2 of the SAR), with subsequent year counts rebounding to levels previously observed in 1991 and 1992. Declines in any given year may result from inter-annual oceanographic variability, which can influence the amount of time animals spend foraging away from

haulouts (e.g., during El Nino periods, animals may spend more time away from land, which would result in lower survey counts). The number of animals ashore may vary considerably depending on the time of day, weather, tidal phase, or prey availability (Harvey and Goley 2011). While surveys are conducted to coincide with low tides that are generally favorable for observing the maximum number of animals ashore, weather and other logistics do not always allow for surveys to be conducted at optimal times, contributing to the inter-annual variability in counts. NMFS is planning to conduct a harbor seal survey during 2012 and will re-evaluate trends when these data have been analyzed.

Comment 43: Although we recognize that the harbor seals- WA/OR stock and WA inland waters stock SAR was not reviewed or revised since 2010, we wish to point out that it states that tribal subsistence takes may be occurring. It should be noted that these takes are illegal in the absence of a waiver of the requirements of the MMPA.

Response: The SARs include all takes of marine mammals reported by Northwest Tribes. MMPA section 117(a) explicitly lists the information that should be included in the SARs. Section 117(a) requries identifying authorized and unauthorized take.

Accordingly, such language is inappropriate for the SARs. The NOAA Office for Law Enforcement conducts investigations into complaints of potential violations of the MMPA involving all citizens within the jurisdiction of the United States.

Comment 44: According to information at the start of the Harbor Porpoise:

Northern Oregon/Washington Coast SAR, it was prepared in April 2011. The most recent abundance survey is stated to be September 2002. This arguably exceeds the 8-year guideline for considering estimates to be outdated. Although most of the verbiage in the

section on "other mortality" is not changed from the prior SAR, we are concerned that there is so little fishery-related mortality documented in the tables and discussion that precede that section. Despite this, the section states that in the 2006-2007 UME, where cause of death could be attributed, much of it was due to trauma and "[s]uspected or confirmed fishery interactions were the primary cause of adult/subadult traumatic injuries." This might suggest that unobserved fisheries are having an impact that is not properly accounted.

Response: In both the Northern Oregon/Washington Coast and the Washington Inland Waters harbor porpoise SARs, the last sentence in the Population Size section states "However, because the most recent abundance estimate is >8 years old, there is no current estimate of abundance available for this stock."

The Alaska Fisheries Science Center and the Northwest Regional Office requested funding for both harbor seal and harbor porpoise surveys in 2011; however, these surveys were not funded in 2011. The Southwest Fisheries Science Center will analyze aerial surveys that have been conducted for leatherback sea turtles in 2010-2011 to determine whether there are sufficient harbor porpoise sightings to estimate their abundance in waters off of Washington and Oregon. Recent vessel surveys may also be used to estimate the abundance of harbor porpoise in Washington inland waters.

Comment 45: In the harbor porpoise Washington Inland Waters SAR, we continue to be concerned that tribal gillnet fisheries are unobserved. Gillnet gear is implicated in harbor porpoise deaths wherever they co-occur, and the SAR indicates that there are even some limited self-reports of interactions with this stock. As the region acknowledged in a prior (1999) SAR for this same stock of harbor porpoise "...because

logbook records (fisher self-reports required during 1990-94) are most likely negatively biased (Credle <u>et al.</u>, 1994), these are considered to be minimum estimates." Perhaps a similar caveat should be re-inserted, and the region should make a concerted effort to work with tribes to try to better quantify interactions.

Response: NMFS continues to encourage tribal co-managers to obtain and provide information on interactions between tribal fishermen and marine mammals. At this time, self-reporting is the only source of information on bycatch of marine mammals in all Pacific Northwest salmon gillnet fisheries (non-treaty and treaty), and based on the analysis by Credle et al. (1994), self-reports represent minimum estimates.

Comment 46: In response to comments on the draft 2010 SARs regarding evidence of at least two populations of melon-headed whales in Hawaiian waters, NMFS stated that new information would be included in the 2011 SARs. However no updated report for melon-headed whales in Hawaiian waters is presented in the draft 2011 SARs.

Response: Melon-headed whales, with all other stocks in Hawaiian waters, will be updated in 2013. Non-strategic stocks are reviewed every three years, such that the next review and update will occur in 2013.

Comment 47: For the Hawaii Pelagic stock of false killer whale, the Status of Stock Section notes that "no habitat issues are known to be of concern for this stock." However, two habitat issues identified in the draft SAR for the Hawaii Insular Stock, elevated levels of PCBs and declines in the biomass of some false killer whale prey species in Hawaiian waters also apply to this stock.

Response: There are no published reports that address polychlorinated biphenyl (PCB) levels in pelagic false killer whales, and it is inappropriate to assume that a pelagic

population would be exposed to these pollutants at the same level as an island-associated stock that feeds closer to land-based pollution sources. We have added text to the SAR acknowledging the potential impacts of reductions in biomass of some prey species.

<u>Comment 48</u>: The NMFS delineation of Pacific false killer whale stocks is artificial and inaccurate.

Response: NMFS has previously responded to this and related comments (see 73 FR 21111, April 18, 2008, Comment 47; 74 FR 19530, April 29, 2009, Comment 34; 75 FR 100316, March 16, 2010, Comment 53; and 76 FR 34054, June 10, 2011, comment 52) and reiterates that the stock division for false killer whales is consistent with the MMPA and with NMFS 2005 Guidelines for Assessing Marine Mammal Stocks, which were finalized after opportunity for public review and comment, and provide guidance on abundance and PBR of transboundary stocks. Since the response to previous comments, the evidence for multiple stocks of false killer whales in the central North Pacific has only grown stronger (see Chivers et al., 2010, referenced in the SAR). Further, as noted in Guidelines for Assessing Marine Mammal Stocks, the lack of genetic differences among false killer whale samples from the broader eastern North Pacific region does not imply that these animals are from a single Pacific stock.

<u>Comment 49</u>: NMFS's abundance estimate for the pelagic stock of false killer whales is inaccurate, arbitrary, and not based on the best available science.

Response: The abundance estimate for the pelagic stock of false killer whales was derived from peer-reviewed and well-established statistical methods for treating line-transect survey data. A new survey was recently completed, as referenced in the 2011

SAR, and the data from that survey are currently undergoing analysis. Using the new data, false killer whale abundance estimates will be revised for the 2012 SARs.

Comment 50: The draft false killer whale SAR determinations regarding the insular stock are inaccurate and arbitrary. Specifically, it inaccurately represents that the Insular Stock is "declining;" it wrongly assigns a deep-set fishery false killer whale interaction to the Insular Stock; and it improperly uses a recovery factor of 0.1 to calculate PBR for the Insular Stock.

Response: NMFS has previously responded to this and similar comments (see 75 FR 12505, March 16, 2010, comment 57; 76 FR 34054, June 10, 2011, comment 54) and reiterates the scientific information supporting the decline has been peer-reviewed and clearly outlines the data and basis for their conclusions. There is no attributed cause of this decline within the SAR, and fisheries have not been implicated at this time. The assignment of take within the insular-pelagic overlap zone is supported by the 2005 Guidelines for Assessing Marine Mammal Stocks. The recovery factor of 0.1 is also appropriate given the proposed listing and is supported by the Pacific SRG.

Comment 51: NMFS arbitrarily picks and chooses which information it will use to support the draft SAR.

Response: NMFS has previously responded to this comment (see 76 FR 34054, June 10, 2011, comment 56).

Comment 52: In the draft SAR, NMFS implements two new changes that result in the allocation of additional false killer whale interactions to the fisheries. NMFS assigns a proportion of false killer whale interactions for which no injury determination has been made and assigns a proportion of "blackfish" interactions as false killer whale

interactions that also count against the fisheries. Neither of these changes in methodology is reasonable or lawful. In the first instance, NMFS proposes to categorize certain interactions as "serious injuries" when, in fact, no data exist from which NMFS is able to ascertain whether the specific interactions in question were serious or not. In the second instance, NMFS proposes to categorize certain interactions as false killer whale interactions when, in fact, no data exist from which NMFS can reliably determine that the interactions in question involved false killer whales. In both cases, interactions are unfairly counted against the fisheries in the absence of data.

Response: The NMFS 2005 Guidelines for Assessing Marine Mammal Stocks state "...in some cases, mortality occurs in areas where more than one stock of marine mammals occurs. When biological information (e.g., genetics, morphology) is sufficient to identify the stock from which a dead animal came, then the mortality should be associated only with that stock. When a dead animal cannot be assigned directly to a stock, then mortality may be partitioned by the abundances of the stocks vulnerable to the mortality (i.e., based on the abundances of each stock within the appropriate geographic area), provided there is sufficient information on stock abundance. When mortality is partitioned among overlapping stocks proportional to the abundances of the affected stocks, the reports will contain a discussion of the potential for over or under-estimating stock-specific mortality." Regarding allocation of serious injury/mortality of "blackfish," these animals were identified as either false killer whales or pilot whales, and to exclude them from the reports would underestimate mortality. The prorating of unidentified animals was recommended and reviewed by the Pacific SRG in 2009 and 2010.

Comment 53: The Western Pacific Regional Fisheries Management Council notes an inconsistent application of the underlying assumptions in calculating PBR between the Hawaiian monk seal and Hawaii insular stock of false killer whale. The draft 2011 SAR reports that the population of Hawaii insular stock of false killer whales has exhibited a statistically significant decline in recent decades, and that model results indicate current declines at an average rate of 9% since 1989. It is not clear from the draft 2011 SAR why the Hawaiian insular stock of false killer whales fails to meet the underlying assumptions of the PBR calculation.

Response: The PBR framework was designed to maintain stocks as functioning elements of their ecosystem in the face of anthropogenic removals. If a stock is below its Optimum Sustainable Population and all anthropogenic factors have been removed, the population should presumably grow. If there are no fishery takes driving the population down (like monk seals in the Northwest Hawaiian Islands) and the population is still declining, then the stock dynamics are not conforming to the assumptions of PBR. Longterm and detailed demographic data are available for monk seals in the Northwest Hawaiian Islands, where most of the stock resides. These data provide unequivocal evidence that the population is declining in the Northwest Hawaiian Islands overall. Further, the current lack of any fisheries in the Northwest Hawaiian Islands means that direct fishery takes cannot be responsible for the decline. Other factors (prey limitation, entanglement in marine debris, shark predation and male seal aggression) are known contributors to the decline. The fact that Hawaiian monk seals are declining despite the lack of direct fishery takes in the Northwest Hawaiian Islands is the basis for the conclusion that the stock does not conform to PBR assumptions. The decline in Hawaiian insular false killer whales is not as well understood, and a cause cannot be absolutely attributed. As described in Oleson et al. (2010), it is highly likely that fishery interactions have impacted insular false killer whales, even if other environmental factors also impact that population. For this reason, application of PBR for this stock is appropriate.

Comment 54: The reported declining trend of the Hawaiian insular stock of false killer whales is inconsistent with NMFS' own best population estimate of the stock over the last decade. The abundance estimate of the insular population has, at minimum, remained stable since the 2000 SAR. At the time, an abundance estimate of 121 false killer whales was used based on calculations made in 2000 using aerial surveys conducted in 1993, 1995, and 1998 within approximately 25 nm of the Main Hawaiian Islands. The draft 2011 SAR estimates the current abundance at 170 false killer whales. The population, therefore, has not declined for at least 10 years and likely since the 1993 aerial survey, thus contradicting the population trend results derived in the Status Review of Hawaiian insular false killer whales.

Response: The draft 2011 SAR discusses the decline of insular false killer whales following the Biological Review conducted for this population under the ESA. The Biological Review Team agreed that the Mobley et al. (2000) abundance estimate of 121 individuals was negatively biased because observers were not able to detect groups below the plane and no adjustment was made for this or for animals that were submerged when the aircraft passed overhead in the calculation of abundance from those surveys, as is suggested in Buckland et al. (2001) "Introduction to Distance Sampling." The 1993 to 1997 estimates also carry high uncertainty due to the unsurveyed 400 m wide strip underneath the plane. For these reasons, the Biological Review Team felt that the 1993

to 1997 estimate of 121 animals was unreliable and chose, instead, to use the encounter rate from each individual aerial survey in its assessment of population trend and extinction risk. The 1993 to 1997 aerial surveys may also be negatively biased due to the small average group size reported, suggesting that the aerial observers did not see the entire group. More recent analyses by Baird et al. (2008) have indicated that group size is positively related to encounter duration and that boat-based encounters less than two hours generally yield an underestimate of total group size. When circling small groups in an airplane, sub-groups on the periphery of the circled group can easily be missed, especially when observers are focused on obtaining group size estimates for the group being circled. For these reasons, it is inappropriate to directly compare the 2000 versus 2010 estimates of population size for false killer whales. The Population Viability Analysis conducted by the Biological Review Team assessed all data sources, including those available from the 1990s aerial surveys, and derived the 9% average decline in a statistically robust analysis.

Comments 55: The Western Pacific Regional Fisheries Management Council comments that NMFS continues to use an outdated minimum population estimate to calculate PBR for the Hawaii pelagic stock of false killer whales, despite compelling evidence from the recent Hawaiian Island Cetacean and Ecosystem. Assessment Survey (HICEAS) II survey in 2010 that the population is much greater than estimated using the old surveys. NMFS acknowledges that the 2010 survey had a six-fold increase in encounter rate than the 2002 survey, but makes no attempt to reflect the new survey results and simply "retains" the old minimum population estimate of 249 false killer

whales. Preliminary analysis results of the 2010 survey, presented at the Pacific SRG meeting held November 7-9, 2011, estimated a higher minimum population estimate.

Response: The draft 2011 SAR is based on data and analyses that were available at the time it was drafted. The results presented at the November, 2011, SRG meeting were intended to provide a preliminary look at the analysis framework employed to derive estimates for the 2012 SARs. Final analyses of the HICEAS II survey data are not complete at this time. As a result, it is inappropriate to use interim results that NMFS and the SRG feel inadequately represent the uncertainty inherent in the data sets that underestimate uncertainty and overestimate the minimum abundance. The new estimates will be included in the 2012 draft SARs.

## Comments on Alaska Regional Reports

<u>Comment 56</u>: The draft SAR incorrectly allocates a single interaction to different central North Pacific humpback whale sub-stocks.

Response: Where there is considerable uncertainty to which stock a serious injury or mortality should be assigned, NMFS exercises a conservative approach of assessing the potential impact of the serious injury or mortality to both stocks. If information were available regarding the location of take, genetics of the taken animal, or other conclusive information linking the serious injury or mortality to a specific stock, NMFS would use to assign the take to a specific stock.

<u>Comment 57</u>: The Commission recommends that NMFS consider the impending changes in the Arctic and develop a long-term assessment strategy that will provide a reliable basis for characterizing population abundance, stock status, and trends, as well as

implementing protective measures that will minimize the effects of Arctic climate disruption on the viability of marine mammal stocks.

Response: NMFS understands that the viability of Arctic marine mammals in the context of a rapidly changing environment is a concern. NMFS will assess Arctic marine mammal abundance, trends, stock identification, foraging ecology, and vital rates, and how these features change in response to environmental and anthropogenic perturbations, as resources become available.

Comment 58: The Commission recommends that NMFS substantially increase its efforts to (1) collaborate with the Alaska Native community to monitor the abundance and distribution of ice seals and (2) use seals taken in the subsistence harvest to obtain data on demography, ecology, life history, behavior, health status, and other pertinent topics.

Response: NMFS works closely with co-management partners and Alaska Native communities to collect stock assessment data on ice seals. NMFS would like to improve its collection of data on subsistence harvest, which has been hindered by resource limitations. NMFS is aware that there are no current abundance estimates for any of the four species of ice-associated seals: ribbon, bearded, spotted, and ringed seals. These species range across the Bering and Chukchi Seas, and conducting surveys of these areas requires substantial resources. Joint US-Russia surveys are planned for spring 2012 and 2013 and are expected to result in abundance estimates for ribbon and spotted seals. Surveys directed at collecting abundance of ringed and bearded seals will be conducted as resources become available.

Comment 59: As the loss of ice in the Arctic progresses and industrial activities increase, increased ship traffic is expected through Unimak Pass and the Bering Strait. Shipping traffic transiting Unimak Pass on its way to and from the Bering Strait is likely to pass through the western portion of the critical habitat area designated in the southeast Bering Sea, putting right whales there at risk. The Commission recommends that NMFS do everything it can to ensure that all vessels operating in the area are aware of the need to protect the North Pacific right whale, and that every practicable step be taken to minimize the probability of entanglements and ship strikes.

Response: Several protective measures and outreach activities are already in place to protect the North Pacific right whale, including providing information cards to vessels operating in Alaska waters. NMFS will continue to work with partners such as Sea Grant, commercial fishers, Native communities, academia, and other recreational and commercial vessel operators on outreach activities.

<u>Comment 60</u>: The Commission recommends that NMFS continue its efforts to better describe the distribution and movement patterns of North Pacific right whales, especially with respect to their distribution during those periods when they are outside designated critical habitat.

Response: NMFS recognizes the importance of monitoring the population status and movement patterns of the eastern stock of North Pacific right whales and will continue to seek resources to study this critically endangered population.

<u>Comment 61</u>: The updating of ice seal SARs is welcome although we still have concerns regarding a lack of abundance data and recent or reliable estimates of Alaska

Native harvest. Several SARs state that "[a]s of 2009, data on community subsistence harvests are no longer being collected...." This warrants an explanation.

Response: NMFS recognizes the need for obtaining reliable estimates of subsistence harvests for all pinniped species in Alaska, including ice-dependent seal species. Due to funding limitations, the subsistence monitoring program conducted by Alaska Department of Fish and Game, which documents Steller sea lion and harbor seal subsistence hunts by village, is no longer supported by NMFS funds. Multi-year ice seal subsistence harvest studies have been started in specific communities by the Ice Seal Committee (six villages to date). This subsistence monitoring program will expand to other communities, with assistance from the Ice Seal Committee. Although some ice seal harvest data have been collected from specific villages, while other harvest data has been collected through tissue sampling programs and individual hunters, NMFS agrees that a full statewide subsistence monitoring program is necessary for ice seals, especially for any ESA-listed stocks.

Comment 62: Many fisheries with either a history of interactions or a high likelihood of interactions remain unobserved or inadequately observed. The region should prioritize funding for fishery observers for the many fisheries (largely gillnet fisheries) that may be interacting with species of concern (e.g., belugas, Pacific white sided dolphins, harbor porpoise, ice seals). The region should seek resources and advice on building a better system of deploying observers.

Response: NMFS is working with fishing industry and Alaska state partners on implementing adaptive sampling in the federal observer program that covers fisheries managed by the State of Alaska. The adaptive sampling methods are designed to increase data collection efficiency. NMFS has recently directed funds to observer effort in nearshore drift gillnet fisheries in southeast Alaska.

Comment 63: Habitat sections of many stock assessments discuss the potential for increased human activities as Arctic ice diminishes. The pressure for offshore exploration and extraction for oil and gas reserves continues as well. These activities that involve high intensity geophysical exploration and high levels of noise related to extraction (as well as increased vessel traffic) are not well addressed in the SARs.

Response: NMFS does address habitat concerns pertaining to oil and gas activities, particularly for those stocks where there is a potential concern. SARs for specific stocks have extensive information on potential habitat concerns depending on what information is available for a particular stock. NMFS will continue to update the habitat section for those stocks as new information becomes available.

Comment 64: Although Table 1 and text in the Steller sea lion Western stock

SAR indicate a slow increase in numbers in the Gulf of Alaska, this is not evident for the

Aleutians. The revised SAR discusses calculation of a PBR by adding language stating
that "some stocks of marine mammals in the U.S. with an obvious declining trend have
been called 'undetermined,'" but the region does not propose this approach for this stock.

We understand that the stock is not declining throughout its range, but the justification
for not calculating a PBR because a downward trend is not anthropogenic in origin is
erroneous. Hawaiian monk seals are declining for reasons that are not primarily
anthropogenic, but the Pacific region has taken a more precautionary approach. We
suggest the same here.

Response: NMFS states that an "undetermined" PBR is not being proposed for the western Steller sea lion stock. A PBR of 253 animals has been calculated for this stock. Because direct human-related mortalities are at a low level and are unlikely to

either be responsible for the decline or to contribute substantially towards extinction risk, calling the PBR level "undetermined" is unnecessarily conservative for this population of over 40,000 animals.

Comment 65: The Steller sea lion Western stock SAR states that "as of 2009, data on community subsistence harvests are no longer being collected." The PBR is calculated for the stock as 253 animals. The most recent data through 2008 indicate that the average harvest is 198. The addition of fishery-related mortality of 29 brings that estimate to 227. As such, the total anthropogenic mortalities to this stock are approaching—and may even exceed—the PBR.

Response: Previous responses (75 FR 12498, March 16, 2010, Comment 19; 76 FR 34054, June 10, 2011, Comment 11) have addressed comments pertaining to the need for current and accurate estimates of subsistence takes for pinnipeds in Alaska, including the western stock of Steller sea lions. The State of Alaska discontinued its collection of subsistence harvest information, and NMFS has insufficient resources to obtain up-to-date estimates of subsistence hunting of pinnipeds and will retain old information, with appropriate dates and caveats if necessary.

Comment 66: The section on "other mortality" in the Steller sea lion Eastern stock SAR does not mention the deaths of Steller sea lions in traps set in the Columbia River on the Oregon/Washington border. In 2008, two Steller sea lions from this Distinct Population Segment died in traps set in the Columbia River as part of a state lethal taking program aimed at California sea lions (NMFS 2011). These deaths should be included in the count provided in the SAR.

Response: NMFS appreciates the commenter bringing this oversight to our attention. NMFS has updated the final 2011 SARs and incorporated these events into mortality estimates for this stock.

Comment 67: The SAR for Beluga whales: Beaufort sea stock acknowledges that abundance data are too old to calculate a PBR, which remains "undetermined." Yet the "status of the stock" section of the SAR says that "the estimated annual level of human-caused mortality (126) is not known to exceed the PBR (324)." This should be removed. PBR is undetermined.

Response: NMFS and the Alaska SRG agree, and the PBR level has been changed to "undetermined" for this stock.

Comment 68: The SAR for Beluga whales: Eastern Bering sea stock acknowledges that a PBR cannot be calculated yet states under status of the stock that "the level of incidental mortality in commercial fisheries is considered to be insignificant." Without a PBR this statement cannot be made.

Response: NMFS appreciates the commenter bringing this error to their attention. This final 2011 SAR states that the estimated minimum annual mortality rate incidental to U.S. commercial fisheries is 0.0. The estimated overall human-caused mortality and serious injury is 193 based on subsistence harvest. The SAR has been modified as the commenter suggested.

Comment 69: The Beluga whale: Cook Inlet stock still faces risk with a calculated rate of decline that is approximately one percent per year. The section on Habitat acknowledges many development projects within their range. The section on "Habitat Concerns" should be expanded to include a general listing of the types of projects

approved with more information on the impacts to the stock and its habitat and with appropriate concern regarding potential challenges to recovery.

Response: NMFS has previously responded to this and similar comments (75 FR 12498, March 16, 2010, Comment 1), and specifically to the "habitat concerns" section of the Cook Inlet beluga SAR (76 FR 34054, June 10, 2011, Comment 22).

Comment 70: There is a note in the 2009 SAR for the Southeast Alaska harbor porpoise stock that an abundance estimate was expected in 2010. The delay is lamentable and needs remedy. We continue to be concerned that observer coverage is lacking for so many gillnet fisheries in the range of the various harbor porpoise stocks in Alaska. The region needs to provide better observer coverage either aboard fishing vessels or from alternative platforms. Further, takes of porpoise in native subsistence nets in the Bering Sea in particular appear poorly documented. The region should update all stock abundance estimates on a priority basis and adopt a more robust observer program for state and federally managed gillnet fisheries.

Response: NMFS is working on developing a new survey design in order to obtain an abundance estimate for waters within Southeast Alaska. Previous survey data are being analyzed to examine trends for the areas that have been consistently surveyed over consecutive years. In order to fully understand trend results from this study, the survey area needs to be expanded to include a more comprehensive survey of harbor porpoise habitat. NMFS is focusing resources for harbor porpoise surveys in Southeast Alaska, where populations overlap with commercial fisheries and may incur incidental mortalities and serious injuries. An observer program will be implemented beginning in

summer 2012 in the Southeast Alaska commercial salmon drift gillnet fishery that overlaps with the distribution of harbor porpoise.

In addition to the observer program being implemented beginning in 2012, the Alaska Region is seeking additional funding to broaden the observer program for gillnet and purse seine fisheries, as well as exploring alternative mitigation measures to reduce bycatch in fisheries known to take harbor porpoises. There are no requirements that harbor porpoise mortalities in subsistence nets be reported to NMFS, so these mortalities will continue to be documented to the extent possible.

<u>Comment 71</u>: The sperm whale SAR, and previous SARs for this endangered species, list the abundance, trend and PBR as "unknown" constantly. The NMFS should consider how best to remedy this situation.

<u>Response</u>: NMFS agrees that an abundance estimate, trend, and PBR are needed for sperm whales in Alaska and will continue to seek resources for necessary surveys.

Comment 72: Baird's beaked whale, Cuvier's beaked whale, and Stejneger's beaked whale stocks have unknown abundance estimates. While the potential impact from anthropogenic noise is acknowledged as a concern for this stock, we are concerned that the lack of understanding of its status will hamper the agency's ability to reliably assess or mitigate impacts from the increasing proposals for ocean energy development, much of which utilizes intense sound for geophysical exploration and construction for extraction.

Response: NMFS agrees that it is necessary to increase the understanding of the abundance, distribution and movements, demographic parameters, natural history, and ecology of beaked whale species in Alaska. With limited resources available, NMFS and

external collaborators are considering alternative methods to best monitor and mitigate the potential effects of noise on these species.

Comment 73: No revisions have been made to the eastern North Pacific gray whale stock definition and geographic range section, despite the availability of recent information that would seem to require updating. It is not clear that all anthropogenic mortalities to this stock have been accounted through 2009. While the section on habitat concerns recognizes the potential increase for oil and gas exploration and extraction, these proposal have been increasing rapidly.

Response: NMFS, with concurrence from the Alaska SRG, determined that not enough information was available to warrant any changes to the status of the stock section for the 2011 eastern North Pacific SAR. Updated mortality and serious injury data is included in the SAR from several sources, including the NMFS stranding network. Only records that are confirmed human interactions and injuries determined to be serious are reported in the SARs. NMFS has included information on the potential risk factors, including oil and gas exploration and extraction, and will continue to update the habitat concerns section as necessary.

Comment 74: We were disappointed to see the limited changes to the humpback whale SARs. Other than updated fishery-related mortality, there were virtually no changes. One change that should be made is mentioning the status review that the NMFS is undertaking for humpback whales worldwide, relative to their listing. Clearly fishery-related mortality and serious injury is underestimated. The SAR for Central North Pacific Humpbacks mentions vessel collisions in Alaska but pays little attention to collisions in the wintering area of Hawaii. There are reports of increasing collisions in

Hawaii that do not appear to be simply an artifact of increased reporting or increasing humpback populations (Lammers et al., 2007).

Response: Both Alaska humpback whale stocks are strategic stocks and reviewed annually. Both SARs underwent extensive changes in 2010, and very little new information has become available since that revision. NMFS conducts an extensive review of all humpback whale mortality and serious injury records from multiple sources for the two Alaska stocks each year. Serious injury determinations for these events are reported in the SARs, including reports of serious injury records from Hawaii. NMFS will report on any additional serious injuries for the two Alaska humpback whale stocks in the 2012 SARs.

Comment 75: Ice seals: The recent stock assessment reports appropriately discuss the impact of sea ice loss and carbon dioxide pollution on ringed, bearded, and spotted seals. They could benefit from additional information concerning these threats. NMFS should also prioritize studies to determine actual population size, trends, and PBR for these stocks. All of these stocks should be considered strategic. The ribbon seal assessment should also include the sea ice and carbon dioxide language and should be listed as strategic.

Response: MMPA section 117(3) contains directions for including risk factors in SARs, which includes summarizing effects on marine mammal habitat that may be causing a decline or impeding recovery for strategic stocks. NMFS does not consider it necessary to expand on these topics in the SAR at this time. NMFS agrees that it is necessary to increase the understanding of the distribution and movements, demographic parameters, natural history, and ecology of ringed, bearded, ribbon, and spotted seals in

Alaska (see 75 FR 12498, March 16, 2010, Comment 5). At this time, none of these stocks qualify to be designated as strategic under the MMPA definition of a strategic stock. Arctic ringed seals and the Beringia DPS of bearded seals have been proposed for listing as threatened under the ESA primarily due to the risk posed by significant habitat loss projected within the foreseeable future (see 75 FR 77476, December 10, 2010; and 75 FR 77512, December 10, 2010). We have no current and reliable data to determine whether these stocks are declining. However, should these population units be listed as threatened, they will then qualify as strategic stocks.

Comment 76: The draft Harbor Seals Lake Iliamna SAR should consider designating the population of harbor seals in Lake Iliamna as a separate stock. Because there is no evidence of genetic interchange or breeding between Lake Iliamna harbor seals and the harbor seals of Bristol Bay, and because this is a unique freshwater population of harbor seals, with no other similar populations known to exist within the U.S., the population of seals in Lake Iliamna should be designated as a separate stock.

Response: NMFS and co-management partners in the Alaska Native community designated 12 stocks of harbor seals based on local knowledge, as well as historical and recent data. NMFS is in the process of evaluating the evidence for discreteness of the harbor seals in Lake Iliamna, including seasonal variation in numbers of seals in the lake, and their genetic makeup.

Comment 77: The sentence "Laidre et al. (2008) concluded that on a worldwide basis belugas were likely to be less sensitive to climate change than other Arctic cetaceans because of their wide distribution and flexible behavior" should be deleted. Indeed, the Convention on Migratory Species considers beluga whales to be threatened

by climate change. A 2009 research paper found some beluga populations to be at high risk from climate change and others to be vulnerable (MacLeod 2009).

Response: A growing body of literature suggests that there will be species-specific responses to changes in Arctic climate, and that not all species will be negatively affected to the same degree. NMFS appreciates the commenter referencing this publication; however, the conclusions in MacLeod (2009) are speculative. NMFS has retained the statement referencing Laidre et al. (2008) and included a citation for Heide-Jørgensen et al. (2010), which gives further evidence that belugas seem to be able to respond well to large-scale habitat changes and may be less sensitive to climate change than other Arctic marine mammal species.

Comment 78: Cook Inlet beluga SAR still considers the small Yakutat population of belugas part of the Cook Inlet stock. As the proposed ESA-listing rule for the Cook Inlet stock notes, Yakutat belugas are genetically and geographically isolated from Cook Inlet belugas. Given their small population size, Yakutat belugas should be designated a separate stock and declared "depleted."

Response: As noted in previous responses (74 FR 19530, April 29, 2009, Comment 14; 75 FR 12498, March 16, 2010, Comment 8), NMFS regulations under the MMPA (50 CFR 216.15) include the beluga whales occupying Yakutat Bay as part of the Cook Inlet stock. Notice-and comment rulemaking procedures would be required to change this regulatory definition. Until such procedures are completed, these animals remain designated as depleted as part of the Cook Inlet stock.

Comment 79: All stock assessment reports for marine mammals that range in the

outer continental shelf leasing areas should be updated to include threats from oil spills

and associated oil and gas drilling activities, including seismic exploration activities.

Response: NMFS appreciates the commenter noting the specific habitat concerns

that may be associated with the outer continental shelf leasing areas. NMFS updated the

SARs as needed for those stocks in the outer continental shelf leasing area.

Dated: May 15, 2012.

Helen M. Golde,

Acting Director, Office of Protected Resources,

National Marine Fisheries Service.

[FR Doc. 2012-12270 Filed 05/18/2012 at 8:45 am; Publication Date: 05/21/2012]

49